GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

UNSTARRED QUESTION NO:3236
ANSWERED ON:07.12.2007
TSUNAMI
Gaikwad Shri Eknath Mahadeo;Mane Smt. Nivedita

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether an Australian geologist has warned that powerful earthquakes could rock the Bay of Bengal, triggering tsunamis that would inundate Myanmar, Bangladesh and possibly India;

(b) if so, the details in this regard; and

(c) the precautionary measures taken/to be taken by the Government in this regard?

Answer

MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF EARTH SCIENCES (SHRI KAPIL SIBAL)

a) Yes Sir. Dr. Phil R. Cummins, a Seismologist at the National Geoscience, an Australian agency in Canberra, published an article in Nature (Vol. No. 449, pp75-78 dated 6th September, 2007) on "The potential for giant tsunamigenic earthquakes in the northern Bay of Bengal".

b) According to this publication, large magnitude tsunamigenic earthquakes probably can occur off the coast of Myanmar. The study, however, does not indicate any time or magnitude of the postulated earthquake. The indicators used in the study include the tectonic environment, which is similar to other subduction zones that experience giant mega-thrust earthquakes, stress and crustal strain observations and historical earthquake activity. The author refers to the historical reports of the 2nd April, 1762 Arakan earthquake, descriptions of which were recorded during a survey in 1841 by the British ship 'Childers'.

Further, the author also mentions that it may be over 200 years before a similar event of 1762 occurs according to GPS (Global Positioning System) observations. The conclusions of the study is based on a worst-case scenario model prediction, which are open to scrutiny, as per the author himself.

According to the reactions/news received on this article from across the globe, including the author himself, these ideas need confirmation before 'policy makers start doing anything'. It may also be mentioned here that there is no scientific technique available anywhere in the world to predict occurrence of earthquakes.

c) Ministry of Earth Sciences, Government of India has already set up an Early Warning System for tsunamis at the Indian National Center for Ocean Information Service (INCOIS), Hyderabad, which is working on a 24X7 basis. On detection of earthquakes of Tsunamigenic potential, the system would issue watch/alert/warning as appropriate about Tsunamis possibly affecting the coastal areas.

Other steps by the coastal states with regard to safe relocation of vulnerable sections of the coastal population, safe shelter, livelihood protection, awareness raising, emergency response etc. have been launched in a big way following Tsunami of December, 2004.